

15-1957-10-14122

The Petrography of Bricks and Tiles

stroyed and form cryptocrystalline and glassy bonding material. During firing, small quantities of new minerals were formed: wallastonite, anorthite, braunmillerite, native iron with calcium, and magnetite.

Card 2/2

A. G. Kotlova

KARYAKIN, L.I.; REMIZOV, I.N.

Alunite concretions in the sands of the Chasov Yar deposits in
the Donets Basin. Vop.min.osad.oibr. 3/4:398-404 '56. (MLRA 9:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov,
Khar'kov, Pedagogicheskiy institut, Khar'kov.
(Chasov Yar--Alunite)

KARYAKIN, L.I.

History of the Mineralogical Museum of Kharkov University.
Min.sbor. no.10:363-368 '56. (MLRA 9:12)

1. Pedagogicheskiy institut, Khar'kov.
(Kharkov--Mineralogical museum)

Karyakin, L. I.

2592 A petrographic investigation of the influence of iron oxides on chrome spinels during heating — I. I. KARYAKIN and P. D. PYATIGOR (Orenburg). 11, 166. 1956. In Russian. Chromite spinels heated in an oxidizing medium with Fe₂O₃ or Fe₃O₄ or Fe oxide form a solid solution. During this heating the spinels are reduced by Fe₂O₃ to Fe₃O₄ or Fe₂O₃ which subsequently transforms into Fe. When the spinels are heated above 1,700°, no separations of free Fe₂O₃ and the spinels from the chrome-spinel ground. When the latter are heated with Fe oxides in a reducing medium, the oxides are at first completely in a solid solution in chrome-spinel and then together with Cr₂O₃ they begin to be reduced to metal (3 fig., 2 tables).

Mattis

2

AM TK

KARYAKIN, L.I.

Effects of technological factors on the microstructure of magnesia (periclase) refractories. L. I. Karyakin and V. I. Maximov (Soviet Refractory Institute, Moscow).—The effects of the crystal structure of periclase are strongly influenced by the process treatment the raw material (natural magnesite) has undergone, especially by grinding to grain size fraction below 0.2, and by the temp. of firing. These crystal effects also control the size of recrystn. of MgO in the fired brick. The chem. activation of the reactions by the formation of crystall. salts (especially with $MgO \cdot Fe_2O_3$) by certain additives considerably increases the energy requirements of the crystal lattice and their changes during the firing operations. As such addins. to metallurgical magnesite batches X. and Y had 0.5% TiO_2 and 1.5% kaolin. The firing temps. were 1400° to 1650°, kept const. for 2 hrs. at the max. Microscopic examin. of the products showed small amounts of corundum and monazellite in the matrix of the periclase crystals and some $MgAl_2O_4$ in the spaces filled with sashua. The samples made from precalined magnesite show a characteristic perpyroblastic texture of the periclase crystals in the matrix, with the typical cleavage planes, and a reduced porosity.

W. Eitel

KARYAKIN, LI

Thermal etching of microsections of chromite ores. P. P.
Pyatikov and L. I. Karyakin. Zavodskye Lab. 22, No. 2
(1930). Microsections of chromite ore in Corundum glass
is then removed on a hot plate. The heat must be
cooled, polished, and hence on a hot part of an oxyacetylene
flame for 5-10 min. at 1750°. This method of etching
is very satisfactory for chrome spinel segregations with low
 Fe_2O_3 or high- FeO content, and fired at temp. not above
1550°; the grains of spinel with close-spaced needles
like hematite are brought out. They do not even when fired
at 1700° and at 1750°.

A-U. Ind. Refractions

KARYAKIN, L.I., LOGVINENKO, N.V.

Remarks concerning the article of M.G.Diadchenko and A.IA.Khatun-tsova "Formation of glauconite in continental conditions." Re-viewed by L.I.Kariakin, N.V.Logvinenko. Zap.Vses.min.ob-va 85 no.3:450-452 '56. (MLRA 9:11)
(Glauconite) (Diadchenko, M.G.) (Khatuntsova, A.IA.)

Karyakin L.I.

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27696

Author : L.I. Karyakin, O.M. Margulis.

Inst : Academy of Sciences of USSR.

Title : Formation of Mullite in Unusual Shape.

Orig Pub: Dokl. AN SSSR, 1956, 109, No 4, 821-823.

Abstract: Mullite (M) in isometrical grains 1 to 15 μ large and sometimes in the shape of short prismatic crystals was detected in unburnt bricks made of Polog kaolin (100%) that had served 1.5 years in covers of soaking pits at temperatures from 1400 to 1450°. The amount of the isometrical M is as follows (in %): in the transition zone of bricks - 15 to 20, in the working zone - 50 to 55, in the scorified crust - 35 to 40. The chemical composition of the residue (of mullite) after the dissolution of the working zone in HF was as follows (in % by weight): SiO₂ - 28.07, Al₂O₃ -

Card : 1/2

-81-

USSR/Chemical Technology. Chemical Products and their Application. J-12
Glass. Ceramics. Building Materials.

Abs Jour: Referat Zh.-Kh., No 8, 1957, 27696

69.55, Fe_2O_3 - 2.46; resistance to fire - 1770° ; interplanar distance of the (610) plane - 1.889 Å (same in the acicular M - 1.866 Å). It seems that the conditions of work are the cause of the formation of isometrical M, viz.: loosening of M at sharp temperature changes, penetration of iron dust into its lattice and work of the refractory material at a comparatively low temperature, which retards the growth of crystallization.

Card : 2/2

-82-

KARYAKIN, L. I.

3

Changes and reactions between chromium spinel and magnesiostefrite during heating. L. I. Karyakin, P. D. Pyatikop, and B. Ya. Sukharevskii. *Doklady Akad. Nauk S.S.R.* 109, 1009-11 (1956). — Cr spinel from the Saratovsk district shows during heating to 1200° a considerable reduction of the a_2 parameter (from about 8.270 Å. to 8.262 Å.); during further heating to 1700°, however, a_2 is increased to 8.277 Å. At the same time, above 1200° a new cryst. phase is observed, which is evidently Cr_2O_4 , with $d(234) = 1.291 \text{ Å}$. at 1200°, and 1.285 Å. at 1500°. Above 1500° this d value remains const. Cr_2O_4 forms with Fe_3O_4 solid solns. which are observed as red anisotropic crystals. By reduction of Fe_3O_4 above 1300°, a mixed ferro-ferrichromite phase is formed. Synthetic mixts. of Cr spinel and MgFe_2O_4 were fired up to 1700°, and examined by microscopic and x-ray methods. The disintegration of MgFe_2O_4 to magnesiowustite and Mg-magnetite ($\text{Mg} \cdot \text{Fe}^{II}\text{Fe}^{III}\text{O}_4$) is marked above 1450°. In mixts. with Cr spinel, MgCr_2O_4 solid solns. are formed with ≈ 2.16 -2.30 (for the range of 20-70% MgCr_2O_4). The solid solns. show a practically linear function of the a_2 values with the molar percentage of MgFe_2O_4 (from 10 to 100%), between 8.25 and 8.33 Å. On the euhedral site the a_2 is decreased by a slight admst. of MgFe_2O_4 from 8.28 to 8.25 Å., evidently by the formation of some $\text{Fe}_3\text{O}_4 \cdot \text{Cr}_2\text{O}_4$ solid solns. which are dissolved in the MgFe_2O_4 . W. Eitel

KARYAKIN, L.I.; VASIL'YEVA, K.F.

Phase composition of films on carborundum products. Min.sbor.
(MIRA 13:2)
no.11:89-94 '57.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov,
Khar'kov.
(Silicon carbide)

KARYAKIN, L.I.; LAZARENKO, Ye.K.; SHKABARA, M.N.

Konstantin Nikolaevich Savich-Zablotskii; on his 80th birthday. Min.sbor. no.11:361-364 '57. (MIRA 13:2)

1. Vsesoyuznyy institut ogneuporov, Khar'kov (for Karyakin).
2. Gosuniversitet, L'vov (for Lazarenko). 3. Vsesoyuznyy institut L'vov (for Lazarenko). 3. Vsesoyuznyy institut shakhtnogo stroitel'stva, Khar'kov (for Shkabara).
(Savich-Zablotskii, Konstantin Nikolaevich, 1877-)

KARYAKIN, L. I.

AUTHOR: Fel'dgandler, G.G.

131-12-8/9

TITLE: Short Reports (Kratkiye soobshcheniya). Conference of the Scientific-Technical Council of the Institute for Refractories in Khar'kov (Sessiya nauchno-tekhnicheskogo soveta instituta ogneuporov v Khar'kove)

PERIODICAL: Ogneupory, 1957, Nr 12, pp. 567-568 (USSR)

ABSTRACT: This conference took place on October 28/30, 1957, and was attended by many representatives of scientific institutes and the corresponding industries. Reports were heard on various problems connected with refractories, of which the following met with the greatest interest:
1.) Professor Karyakin, L.I., head of the petrographical laboratory of the Khar'kov Institute for Refractories, spoke about the results obtained by research work connected with kaolins and clays of the Ukraine. 2.) I.G. Orlova, Candidate of Technical Sciences, gave a report on the research work carried out concerning sintering and swelling up of refractory clays and kaolins when heated. 3.) T.S. Ignatova, scientific collaborator of long standing of the Ural department of the Leningrad Institute for Refractories, delivered a report on the results obtained by laboratory work as well as by the industrial testing of the rational utilization of primary kaolin found in the Kyshtym deposits and of the semiacid clays discovered in the Ural deposits.

Card 1/2

131-12-8/9

Short Reports. Conference of the Scientific-Technical Council of the Institute
for Refractories in Khar'kov

4.) A.P. Sarmin, head of the Geological Laboratory for Raw Materials of the Leningrad Institute for Refractories, spoke about the geological and technological characteristic of the kaolin-hydral^r gillite raw material found in the Arkalyk deposits in the Kazakh SSR.
5.) Professor G.V. Kukolev and his collaborator (Khar'kov Institute for Refractories), investigated the influence exercised by additions upon the sintering of kaclins. 6.) O.M. Margulis, the scientific collaborator of the Khar'kov Institute for Refractories, gave a report on the technology of the production of the testing of unburnt kaolin products in practice, the durability of which in furnaces is often greater than that of burnt ones. Finally, quite an amount of work was mentioned which ought to be carried out.

ASSOCIATION: Ferrous-metallurgical Department of the State Planning Committee of the RSFSR (Otdel chernoy metallurgii Gosplania RSFSR)

AVAILABLE: Library of Congress

Card 2/2

KARYAKIN & I.

~~Changes in the phase composition of an unrefined refractory brick from primary kaolin after service.~~ L. V. Karyakin and O. M. Margulits (Inst. Refractory Materials, Kirovograd, Oktiabr' 22, 123-6 1957). Cf. C.I. 51, 207 ff. [Ink of 1/4 E 2c]
100% Polozhali kaolin is produced from 85% calcined chon-
otte and 15% kaolin binder. It is used in the steel industry,
especially in kilns with a service temp. of 1350-1450° in
which they are exposed to Fe oxide scale dust. While the
unchanged cooler parts of the brick, after 1 year of service,
showed the normal microscopic features with mullite needles,
quartz, cristobalite, and glass, in the hotter zones near the
scale-covered surface there is a peculiar short-prismatic
"isometric" form of mullite crystals with $\tau = 1.660$ -1.690,
and $a = 1.648$ -1.678, systematically increasing evidently by
increasing contents in Fe_2O_3 . Towards the hot surfaces the
crystals grow from 15 to 40 μ in length, embedded in an
orange-yellow glass with $s = 1.840$ -1.862. In this glass ap-
pears a 2nd, optically normal and fine-acicular, mullite. The
chem. analysis of isolated isometric mullites showed
 Al_2O_3 59.55, Fe_2O_3 2.46, and SiO_2 28.07%. The (010) inter-
ference line in the x-ray diagram, which has normally a
 $d = 1.1866$ Å, is increased by the Fe_2O_3 content to 1.1879
Å. Evidently, for the formation of this isometric mullite
a temp. above 1400°, and the presence of Fe_2O_3 scale,
together with a long period of heat exposure as it is given in the
metallurgical kilns and combustion chambers, are neces-
sary. W. Eitel

KARYAKIN, L. I. and K. N. REPENKO

"Synthesis of Minerals in a Chrome-spinel Reaction with Magnesium Oxide at High Temperatures" p. 382

~~Transactions of the Fifth Conference on Experimental and Applied Mineralogy~~

~~and Petrography, Tula, Moscow, Izd. AN SSSR, 1961, 217.~~

Abstracts of reports presented at conf. held in Tula, Russia, 1960. The purpose of the conf. was to exchange information and investigate the possibilities in the fields of experimental and applied mineralogy, geochemistry, and to discuss the increasing complexity of problems in petrology.

AUTHOR: Karyakin, L. I. 131- 58-6-7/14

TITLE: On the Mineralogical Composition of the Secondary Kaolin of the Novoselitskoye Deposit (O mineralogicheskem sostave vtorichnogo kaolina novoselitskogo mestorozhdeniya)

PERIODICAL: Ogneupory, 1958, Vol. 23 Nr 6, pp. 268-269 (USSR)

ABSTRACT: In this article the author only refers to some inaccuracies contained in the article by D. P. Zegzhda (periodical "Ogneupory" Nr 3, 1955) (reference 1). Zegzhda maintained, based on the investigations of the test drills, that the increased content of Al_2O_3 in kaolin (up to 72,8 %) depends on the presence of allophane. The author of this article investigated samples of the secondary kaolin of the Novoselitskoye deposit with an Al_2O_3 content of more than 39,5 %.
The chromatic investigations were carried out by M. Ye. Drizheruk who found the presence of kaolinite and hydrargillite which amount to from 95 - 98 % of the

Card 1/3

On the Mineralogical Composition of the Secondary Kaolin of the Novoselitskoye Deposit 131-58-6-7/14

total mass. According to data of electron microscopy (A. I. Kovalev) they predominantly consist of particles of the size of from $0.05 - 0.5 \mu$. The amount of the other minerals is about from 2 - 5 %, with quartz being predominant. The thermal investigation of the kaolin samples with an increased Al_2O_3 content as carried out by V. V. Pustovalov proved the results of microscopic investigations. The figure shows a thermograph of the sample n.5 of kaolin of the Novoselitskoye deposit. Radiographic investigations carried out by B. Ya. Sukharevskiy showed that kaolinite and hydrargillite have to be considered main components of the kaolins with increased Al_2O_3 content. This was also found by S. V. Potapenko in his work. Finally the author called the work by D. P. Zegzhda useful in spite of its single insufficiencies. He also maintains that with respect to quantity and quality the Novoselitskoye deposit exceeds many great deposits of the USSR. It was deplorable that until now no possibility of a selective yield for

Card 2/3

On the Mineralogical Composition of the Secondary Kaolin of the Novoselitskoye Deposit 131-58-6-7/14

kaolins was found. There are 1 figure and 9 references which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov
(All-Union Scientific Research Institute of Refractories)

1. Minerals--Analysis 2. Minerals--Properties 3. Electron microscopy

Card 3/3

18 (0)

AUTHORS: Karyakin, L. I., Ivanov, Ye. V. SOV/131-59-10-6/10

TITLE: Petrographical Study of Converter Slags Formed During Upper
Introduction of Oxygen in an Open-hearth Pig-iron Furnace

PERIODICAL: Ogneupory, 1959, Nr 10, pp 455-462 (USSR)

ABSTRACT: This paper gives the results of a petrographical study of the slag which was formed in the converter of the Petrovsk Works, and into which pure oxygen was introduced from above into open-hearth pig-iron. The chemical composition of the pig-iron and steel after the introduction of oxygen is given in table 1. The converter was lined with magnesite bricks of the "Magnezit" Works, whose properties are described in more detail. Lime, iron-ore, and bauxite were added, whose chemical composition may be seen from table 2. The chemical and mineralogical composition of the slags are indicated in tables 3 and 4. Further, the slags are described in detail, and figures 1 and 2 show the sections of the primary slag. The final slags belong to the basic class. Their basicity varies from 2.8 to 4.5. The latter are also described in detail, and their sections are indicated in figure 3. The chemical and mineralogical composition of the primary and final slags are

Card 1/2

Petrographical Study of Converter Slags Formed During SOV/131-59-10-6/10
Upper Introduction of Oxygen in an Open-hearth Pig-iron Furnace

different. This is explained by the fact that the reactions of slag formation in the converter proceed more slowly than the oxidation of the additions in the pig-iron as shown by figures 4 and 5. Conclusions: It was found that the primary converter slag is a compound silicate melt. The refractory converter lining is worn out most strongly in the last minutes of oxygen introduction, which is further intensified by the addition of iron-ore. Instead of iron-ore, an addition of scrap iron may be very useful for the protection of the refractory lining. There are 7 figures, 4 tables, and 9 references, 8 of which are Soviet.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov
(Ukrainian Scientific Research Institute for Refractories)

Card 2/2

TSEYTLIN, L.A.; KARYAKIN, L.I.; YELTYSHEVA, A.A.

Studying the wear of linings of copper smelting induction furnaces.
Ogneuproy 25 no. 3:123-126 '60. (MIRA 13:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuprov.
(Metallurgical furnaces)

KARYAKIN, L.I.; ZELENSKAYA, A.T.

Alteration of quartz porphyry due to heating. Dokl. AN SSSR 136
no. 2:434-436 '61. (MIRA 14:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
Predstavлено академиком N.V. Belovym.
(Armenia---Porphyry) (Refractory materials)

KARYAKIN, L.I.

Mineralogical composition of grog refractories following their
service in a blast furnace. Sbor.nauch.trud. UNIIO no.5:137-167
'61. (MIRA 15:12)
(Refractory materials--Analysis) (Blast furnaces)

KARYAKIN, L.I.

Mineralogical composition of siliceous sandstones in the Kanev-Buchakian stage of the Ukrainian S.S.R. Vop. min. osad. obr. 6:3-13 '61. (MIRA 15:6)
(Ukraine--Sandstone)

JUN 25 1963

PHASE I BOOK EXPLOITATION

SOV/6266

Karyakin, Leonid Ivanovich

Petrografiya ogneuporov (Petrography of Refractory Materials) Khar'kov,
Metallurgizdat, 1962. 314 p. Errata slip inserted. 3050 copies
printed.

Ed. of Publishing House: R. A. Belina; Tech. Ed.: S. P. Andreyev.

PURPOSE: This book is intended for laboratory personnel of refractory, metallurgical, and glass factories as a basic manual and as a means for popularizing industrial microscopy. It may also be used by refractory specialists and students.

COVERAGE: The book deals with the application of microscopy in laboratory techniques for the study of refractory products and raw materials. The text includes pertinent information on geometric and optical crystallography. Microscopic descriptions are given for all industrial refractories prior to and after exploitation. The book contains numerous figures and tables. There are 644 references, both Soviet and non-Soviet.

Card 1/4

KARYAKIN, L.I.

Mineral formation processes in blast furnaces. Min. sbor. no.16:
359-372 '62. (MIRA 16:10)

1. Ukrainskiy institut ogneuporov, Khar'kov.
(Refractory materials) (Blast furnaces)

KARYAKIN, L.I.; MINKOVICH, E.D.

Petrographic investigation of rejected magnesite (periclase)
firebrick. Ogneupory 27 no.4:172-178 '62. (MIRA 15:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
(Refractory materials--Quality control)

34483

S/020/62/142/004/021/022
B101/B110

15.2240
AUTHORS: Kaynarskiy, I. S., and Karyakin, L. I.

TITLE: Mineral formation by contact between silicon carbide and ferric and calcium oxide

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 4, 1962, 887 - 889

TEXT: The cause of destruction of carborundum refractories (CR) by contact with iron scale or CaO at 1600°C was investigated. CR were prepared by a method described earlier (Sborn. nauchn. tr. Vses. nauchno-issl. inst. ogneuporov, no. 2 (49), 319 (1958)). They consisted of 0.7 - 0.5 mm carborundum grains, a cement mass of small carborundum grains, a glass-like mass, and anisotropic grains ($N \sim 1.534$) with slight birefringence, probably nephelin. CR cylinders ($h = 75$ mm, $d = 50$ mm) were bored out (h and d of the cavity, 25 mm), filled with iron scale or CaO, and heated for 12 hr in air at 1600°C. (1) Slight corrosion set in with iron scale. The cavity contained a black, porous, slag-like mass which consisted of magnetite, β -cristobalite, and some hematite. The cristobalite had formed partly from SiO_2 grains contained in the scale and partly by oxidation of SiC. ✓

Card 1/3

S/020/62/142/004/021/022
B101/B110

Mineral formation by contact...

The scale consisting of 80% FeO, melts, oxidizes, and turns into magnetite and partly into hematite. These oxides react more weakly with SiC than FeO. This explains the low destructive effect of the scale. (2) Intensive destruction set in with CaO. In a 5 - 8 mm thick transition zone, the number of carborundum grains had slightly decreased, and some glass-like substance had formed. In the outer zone, a decrease of the number of small carborundum grains and corrosion of the large ones occurred under formation of pores. The inner wall was covered with a porous, white crust of about 10 mm thickness, consisting of β -cristobalite and a glass-like substance ($N \sim 1.510 - 1.515$). On the outer wall, the β -cristobalite was acicularily crystallized, and pseudo-wollastonite was found. The low N of the glass-like substance suggests low Ca content, since glass corresponding to the composition $CaSiO_3$ ought to have an N of ~ 1.670 . \checkmark

CaSi₂ and Ca₂C were not found. With CaO, CR with 10% ferrosilicon showed the same corrosion phenomena, but more pseudo-wollastonite had formed. Simultaneous action of FeO and CaO increased corrosion. There are 1 table and 8 references: 6 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: R. J. Scace, G.A. Slack, Silicon Carbide, 1960, p. 24; E. Guy, J. Am. Ceram. Soc., 41, 347 (1958).

Card 2/3

LAZARENKO, Ya.K.; KARYAKIN, L.I.; KANSKIY, N.Ye.

Mikhail Nikolaevich Shkabara; 1914-1962, obituary. Min. sber. no.17:
255-257 '63. (MIRA 17:11)

1. Gosudarstvennyy universitet, Lvov (for Lazarenko). 2. Ukrainskiy
nauchno-issledovatel'skiy institut ogneuporov, Khar'kov (for Karyakin).
3. Ukrainskiy zaochnyy politekhnicheskiy institut, Khar'kov (for Kanskiy).

LOGVINENKO, N.V.; KARYAKIN, L.I.; BERGER, M.G.; KULESKO , G.I.

Natrolite group minerals. Zap. Vses. min. ob-va 92
no.3:269-280 '63. (MIRA 17:9)

1. Khar'kovskiy gosudarstvennyy universitet i Ukrainskiy
nauchno-issledovatel'skiy institut ogneuporov.

KARYAKIN, L.I.; KANSKIY, N.Ye.; FRANK-KAMENETSKIY, V.A.

Mikhail Nikolaevich Shkabara; obituary. Zap.Vses.min.ob-va 92 no.4:
496-498 '63. (MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (for Kar-yakin).
2. Ukrainskiy zaochnyy politekhnicheskiy institut (for Kanskiy).
3. Leningradskiy universitet (for Frank-Kamenetskiy).

KARYAKIN, L.I.

Formation of sylvite in a blast furnace. Dokl. AN SSSR 148 no.2:
391-393 Ja '63. (MIRA 16:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
Predstavлено академиком N.V. Belovym.
(Sylvite) (Blast furnaces)

KARYAKIN, L.I.

~~Processes of mineral formation in blast furnaces and the effect
of these processes on the wear of refractory linings.
Ogneupory 29 no. 5:209-213 '64.~~ (MIRA 17:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

L 59369-65 ENT(1)/EMP(e)/EPA(s)-2/EWT(m)/EMP(t)/EP5(w)-2/EEC(t)/I/EWP(b)
Pab-10/Pt-7/P1-4 IJP(c) GG/MH

47

46

B

ACCESSION NR: AP5016601

UR/0363/65/001/005/0816/0822

666.3:539.24

AUTHOR: Degtyareva, E. V.; Kavarskiy, I. S.; Karyakin, L. I.; Alekseyenko,
L. S.TITLE: Dielectric properties of corundum ceramics and their microstructureSOURCE: AN SSSR, Izvestiya. Neorganicheskiye materialy, v. 1, no. 5, 1965,
816-822TOPIC TAGS: corundum ceramic, ceramic additive, ceramic structure, ceramic
dielectric property, titanate modifier, corundum grain size, silicate modifier

ABSTRACT: Corundum ceramics were prepared from alumina preheated at 1450-1750°C. Raising the temperature of this pretreatment and decreasing its dispersity reduces the size of the crystals making up the corundum ceramic; wet milling of the preheated alumina causes an enlargement of the corundum crystals in the ceramic. The samples were made by slip casting the preheated alumina in gypsum plaster molds and firing for 6 hr. at 1750°C. A rise in the Al₂O₃ content considerably increases the crystal size, whereas $\text{V-Al}_2\text{O}_3$ reduces it. Addition of magnesium, aluminum and zirconium titanates decreases the size of corundum

Card 1/2

L 59369-65

ACCESSION NR: AP5016601

crystals. However, this effect is weaker the larger the amount of TiO₂ introduced with the modifier. The introduction of various magnesium-containing modifiers (without TiO₂), including magnesium silicates, substantially reduces the crystal size of the corundum ceramic and provides for a uniform grain size. The microstructure and composition of the additives determine the dielectric properties of the ceramics to a considerable extent. The breakdown voltage of the ceramics with or without various titanates, titanium dioxide, and zirconium dioxide reaches its maximum value at a mean cross section of the crystals of 0.002-0.04 mm²; the tangent of the dielectric loss angle then has minimum values. When magnesium-containing additives (besides magnesium titanates) are introduced, the breakdown voltage rises steadily with decreasing crystal size, and increases particularly when the structure is very finely crystalline. Orig. art. has: 9 figures and 4 tables.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov,
Khar'kov (Ukrainian Scientific Research Institute of Refractories)

SUBMITTED: 30Oct64

ENCL: 00

SUB CODE: MF

NO REF Sov: 010

OTHER: 001

Card 2/28/64

KAYNARSKIY, J.S.; GAODU, A.N.; KARYAKIN, L.I.; USATIKOV, I.F.

Technology of corundum refractories. Ogneupory 30 no.2:37-41 '65.
(MIRA 18:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogenuporov.

PIROGOV, A.A.; LEVE, Ye.N.; KARYAKIN, L.I.

Magnesia concrete on a basis of high-alumina cement. Ogneupory
30 no.6:27-34 '65. (MIRA 19:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

KARYAKIN, L.I.; TSYNKINA, V.M.

Formation of kotoite and ludwigite in a glass furnace. Dokl. AN SSSR
163 no.3:714-717 Jl '65. (MIRA 18:7)

1. Submitted March 15, 1965.

KARYAKIN, L.

Investigating the upper layers of the atmosphere. Radio no.12:19-20
D '57. (MIRA 10:11)

1. Rukovoditel' ionosfernoy sluzhby tekhnicheskogo upravleniya
Ministerstva svyazi SSSR.
(Atmosphere, Upper--Rocket observations)

KARYAKIN, L.I.

The International Geophysical Year. Vest. sviazi 17 no. 7:20-22 Jl
'57.
(MLRA 10:8)

1. Nachal'nik otdela ionosfernoy sluzhby Tekhnicheskogo upravleniya
Ministerstva Svyazi SSSR.
(International Geophysical Year, 1957-1958)

KARYAKIN, L.I., inzhener.

The U.S.S.R. has opened the era of interplanetary flight. Vest.
sviazi 17 no.10:63 O '57. (MIRA 10:11)
(Artificial satellites)

KERBLAY, Tamara Semenovna.; KARYAKIN, L.I., otv. red.; BROYT, E.M., red.;
BERESLAVSKAYA, L.Sh., tekhn. red.

[Radio forecasts and their compilation] Radioprognozy i ikh sostavlenie.
Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1958. 38 p.
(MIRA 11:11)

(Radio, Shortwave--Transmitters and transmission)
(Ionospheric radio wave propagation)

29(5)

SOV/111-59-3-10/26

AUTHOR: Karyakin, L.I., Chief Ionospheric Specialist

TITLE: Radio Equipment of the Cosmic Rocket (Radiosredstva
kospicheskoy rakety)

PERIODICAL: Vestnik svyazi, 1959, Nr 3, pp 15-16 (USSR)

ABSTRACT: The article is concerned with the role of radio in the study of space, the transmission, reception, and processing of data received from satellites, and the significance of the observations and measurements which rockets in inter-planetary space can make. The author deals particularly with the moon rocket, launched January 2, 1959 in the USSR, and presently in orbit about the sun. The last stage of this rocket, weighing 1,472 kg (without fuel) was equipped with a special container with measuring equipment for observation of: the moon's magnetic field, studying the intensity of cosmic radiation, detection of lunar radioactivity, study of the distribution of heavy nuclei in cosmic radiation, study of the gaseous component in inter-planetary matter,

Card 1/3

Radio Equipment of the Cosmic Rocket

SOV/111-59-3-10/26

study of the corpuscular radiation of the sun, and study of meteoric particles. Transmission of data from the rocket to the earth was accomplished through a telemetry system, consisting of a transmitter in the container, and a network of receiving stations at control points on the earth, operation of which is very briefly and simply explained. Data on cosmic rays was transmitted at 19.995 and 19.997 mc. Fundamental scientific information was sent at 19.993 mc, and a transmitter on 183.6 mc was used for measurement of the rocket's motion, and transmission of scientific information. A network of radio-tracking stations followed the rocket in flight, and determined separate sections of its orbit. The phase methods of distance measurement with the aid of radio waves, developed in the 1930s by L.I. Mandel'shtam and N.D. Papaleksi, were used in equipment for observation of artificial satellites, it is noted. In concluding, the author mentions that scientists

Card 2/3

Radio Equipment of the Cosmic Rocket

SOV/111-59-3-10/26

are developing a series of projects on the radio-guidance of space ships, and the creation of permanent radio beacons in space, for navigation purposes. There is 1 photograph.

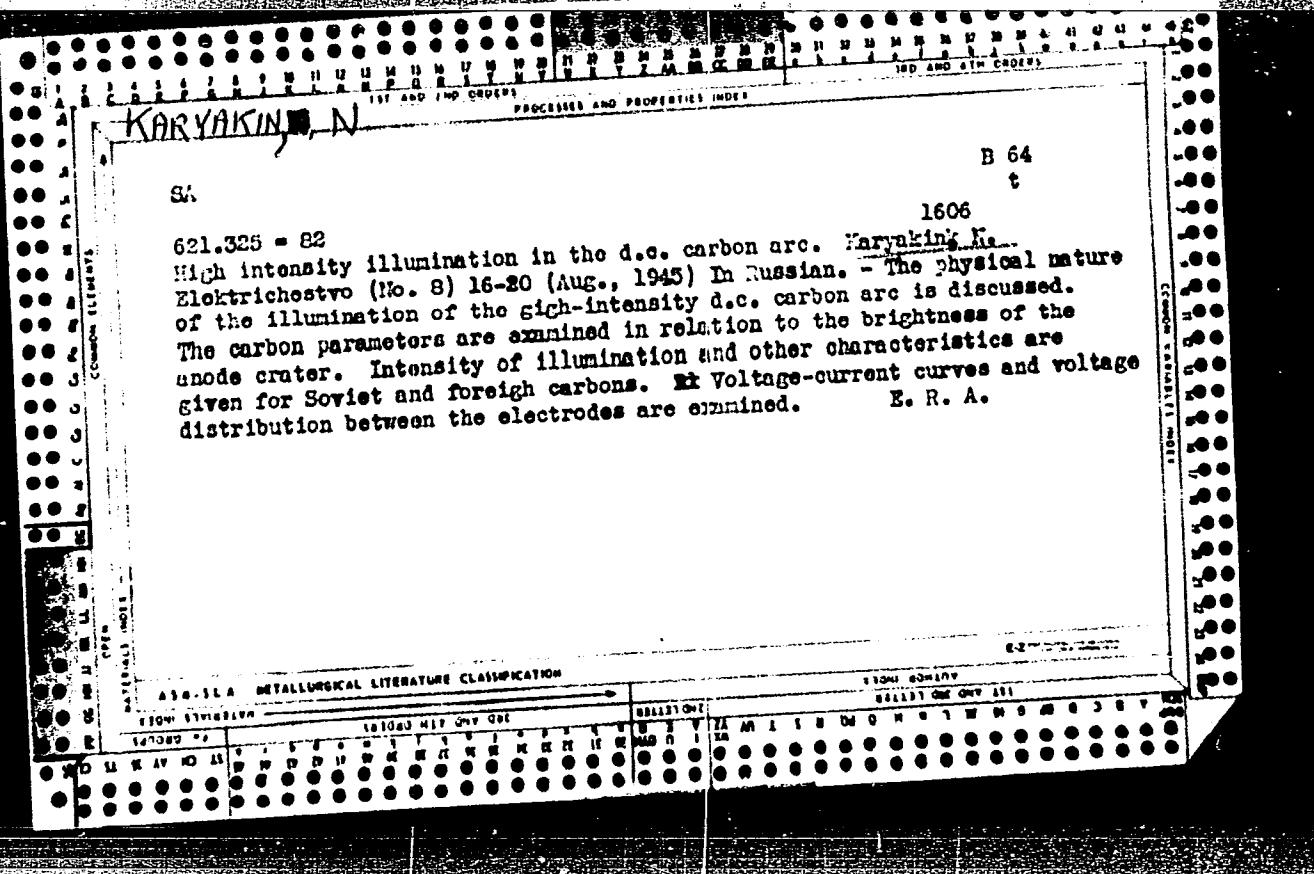
ASSOCIATION: Tekhnicheskoye upravleniye Ministerstva svyazi SSSR
Technical Administration of the Ministry of Communications of the USSR)

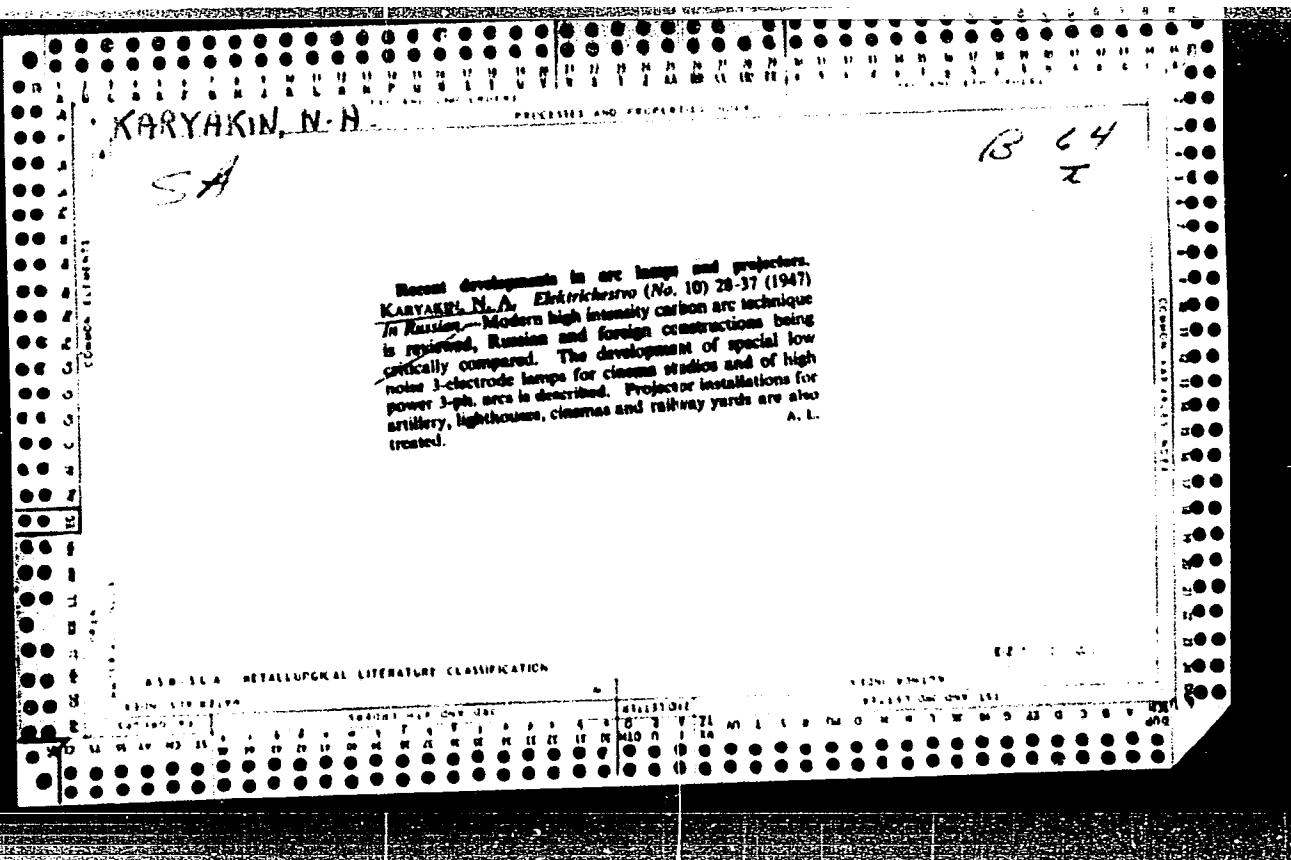
Card 3/3

KARIAKIN, A.

Kariakin, A.
"Selection of dimension figures relation to power looms in installation. Tr. from
the Russian." p. 40.
(Magyar Textiltechnika. No. 2, Feb. 1953, Budapest.)

SO: Monthly List of East European Acquisitions, Vol. 2, No. 9, Library of Congress, September
1953, Incl.





KARYAKIN, N. A.

KULEBAКIN, V. S., NILENDER, R. A., MAYZEL, S. G., YERCHUN, A. A.
MESHKOV, V. V., SOKOLOV, M. V., KARYAKIN, N. A., SAMSONOVA, V.

Electric Engineers

Prof. B. F. Fedorov. Sixtieth anniversary of his birth, and thirtieth anniversary of
his teaching and engineering activity. Elektrichestvo no. 6, 1952.

Monthly List of Russian Accessions. Library of Congress, November, 1952. UNCLASSIFIED

KULEBAKIN, V.S., akademik, otvetstvennyy redaktor; KARYAKIN, N.A.,
redaktor izdatel'stva; MOSKVICHENVA, N.I., tekhnicheskiy redaktor

[A reference book on illumination engineering] Spravochnaya kniga
po svetotekhnike. Moskva. Vol. 1. Svetovye pribory i istochniki
sveta. 1956. 471 p. (MLRA 9:10)

1. Akademiya nauk SSSR. Otdeleniye tekhnicheskikh nauk
(Lighting)

GUREVICH, M.M., professor; KARYAKIN, N.A., professor; MESHKOV, V.V.,
professor; SOKOLOV, M.V., professor; TIKHODEYEV, P.M., professor;
FABRIKANT, V.A., professor; IVANOVA, N.S., kandidat tekhnicheskikh
nauk; SHNEYBERG, Ya.A.; YUROV, S.G.; ASHKENAZI, G.I., inzhener.

Professor L.D. Bel'kind; on his sixtieth birthday. Svetotekhnika
2 no.5:26 S '56. (MLRA 9:11)

(Bel'kind, Lev Davidovich, 1896-)

KARYAKIN, N.A.

KARYAKIN, N.A., doktor tekhn. nauk, prof.

Selecting parameters for catadioptric elements of the optical profile
in Fresnel lenses. Svetotekhnika 3 no.12:1-6 D '57. (MIRA 11:1)

1. Moskovskiy energeticheskiy institut.
(Lenses)

KARYAKIN, N.A., prof., doktor tekhn.nauk; GRIBANOV, A.I., kand.tekhn.
nauk; LOBAKOV, Z.N.

Transients in lighting arcs with carbon electrodes. Svetotekhnika
5. no.7:8-13 J1 '59. (MIRA 12:9)

1. Moskovskiy energeticheskiy institut.
(Electric lighting, Arc)

KARYAKIN, N. I.

Strains and Stresses

Method of calculation torsion cf thin, multiple span bars by bending at given points.
Vest. inzh. i tekhn., no. 3, 1948

Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.

KARYAKIN, N. I.

21669 KARYAKIN, N. I. Metod uzlovykh deplanatsiy dlya rascheta
tonkostennykh mnogoproletnykh sterzhney na kruchaniye. Trudy
Mosk. elektromekhan. in-ta inzhenorov zh.-i. transporta im.
Uzerzhinskogo, vyp. 57, 1949, s. 3-20.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

Method of conditional deplanations for calculating
of thin-walled multispan rods under torsion

KARYAKIN, N. I.

napryazheniya

21670

KARYAKIN, N. I. *Napryazheniya v tonkostennyykh krivykh brus'yakh*
Trudy Mosk. elektromechhan. in-ta inzhenerov zh.-d. transporta
im. Dzerzhinskogo, vyp. 57, 1949, s. 222-68.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva 1949

Stresses on thin-walled curved beams.

SOV/124-58-2-2112

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 87 (USSR)

AUTHOR: Karyakin, N. I.

TITLE: Flexo-torsional Vibrations of Thin-walled Beams (Izgibno-krutil'nyye kolebaniya tonkostennykh sterzhney)

PERIODICAL: Tr. Belorussk. in-ta inzh. zh.-d. transp., 1957, Nr 1, pp 147-151

ABSTRACT: A partial presentation of a paper by the author (ref. RZhMekh, 1958, Nr 2, abstract 2111). Reviewer's name not given

Card 1/1

SOV/124-58-2-2111

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 87 (USSR)

AUTHOR: Karyakin, N. I.

TITLE: Vibrations of Thin-walled Beams (Kolebaniya tonkostennykh sterzhney)

PERIODICAL: Sb. nauchn. rabot. Vyssh. shkola promysl. kooperatsii, 1957, Nr 2,
pp 3-34

ABSTRACT: A presentation of calculation methods for the vibration of thin-walled beams; the methods are based in part on an analogy between the problems of constrained twisting and longitudinal-transverse flexure, buckling and in part on minimum principles. The author examines problems of the free torsional vibrations of beams having a constant section and a continuous mass distribution, on the vibrations of beams lying on a continuous elastic foundation, and on torsional and flexo-torsional vibrations of beams, including eccentrically compressed beams.

A. K. Mroshchinskiy

Card 1/1

SOV/124-58-8-9094

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 112 (USSR)

AUTHOR: Karyakin, N.I.

TITLE: The Forced and Free Torsional Vibrations of Multispan Thin-walled Beams (Vynuzhdennyye i svobodnyye krutil'nyye kolebaniya mnogoproletnykh tonkostennykh sterzhney)

PERIODICAL: Sb. nauchn. rabot. Vyssh. shkola promysl. kooperatsii, 1957, Nr 4, pp 3-13

ABSTRACT: On the basis of the analogy existing between the differential equations for the restrained torsion of a beam and the differential equations for its transverse buckling flexure, the author constructs a "three second-order moment dynamic equation" for application to the problem of the free and the forced torsional vibrations of a multispan thin-walled beam. Two illustrative examples are given.

V.V. Bolotin

Card 1/1

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2

KARYAKIN, N.I., prof., doktor tekhn.nauk

Using equation of three binary moments in calculating dynamics
of structures. Nauch.dokl.vys.shkoly; stroi. no.2:29-36 '58.
(MIRA 12:1)

(Structures, Theory of)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2"

PHASE I BOOK EXPLOITATION SOV/4909

Karyakin, Nikolay Ivanovich, Professor, Doctor of Technical Sciences

Osnovy rascheta tonkostenniyh konstruktsiy; prochnost', ustoy-chivost' i kolebaniya (Fundamentals of Designing Thin-Walled Constructions; Durability, Stability and Oscillation) Moscow, Gos. izd-vo "Vysshaya shkola," 1960. 238 p. 6,500 copies printed.

Ed.: K. I. Anoshina; Tech. Ed.: I. F. Mulikova.

PURPOSE: This textbook is intended for students who are studying machine building and construction at schools of higher technical education.

CONTENTS: The author explains fundamentals of the theory of strength, stability, and dynamics of thin-walled structures used in aviation, ship building, and railroad-car production. This theory employs the analogy between the longitudinal-transversal bending and the constricted torsion, and makes possible the descriptive solution of static and dynamic problems of the constricted torsion of open- and closed-cross-section

Card 1/6

Fundamentals of Designing (Cont.)

SOV/4909

bars and their systems. No personalities are mentioned. There are 62 references: 60 Soviet and 2 German.

TABLE OF CONTENTS:

Introduction	3
Ch. I. Torsion and Bending of Thin-Walled Bars	
1. Free torsion	6
2. Constricted torsion of thin-walled open-cross-section bars	8
3. Normal stresses under constricted torsion of thin-walled open-cross-section bars	10
4. Tangential stresses under constricted torsion of open-cross-section bars	15
5. Determination of coordinates of the center of bending	16
6. Dependence between tangential and normal stresses, and static factors	19
7. Differential equation of twist angles	22

Card 2/6

KARYAKIN, Nikolay Ivanovich; IYSTROV, Konstantin Nikolayevich; KIREYEV,
Petr Semenovich; STRAKHOVSKIY, G.M., red.; PERKOVSKAYA, G.Ye.,
red. izd-va; YEZHNOVA, L.L., tekhn. red.

[Brief handbook on physics] Kratkii spravochnik po fizike. Mo-
skva, Vysshiaia shkola, 1962. 599 p. (MIRA 15:11)
(Physics)

S/020/63/149/002/018/028
B117/B186

AUTHORS: Rabinovich, I. B., Tel'noy, V. I., Karyakin, N. V.,
Razuvayev, G. A., Corresponding Member USSR

TITLE: Thermochemistry of tetraethyl germanium and hexaethyl
germanium

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 2, 1963, 324-326

TEXT: The combustion and formation enthalpies of Et_4Ge and Et_6Ge_2 were determined, and the bond energies of the Ge-C and Ge-Ge bonds in these compounds were calculated. Et_4Ge was synthesized according to a method described previously (K. A. Kocheshkov, Sinteticheskiye metody v oblasti metallorganicheskikh soyedineniy (Methods of synthesis in the field of organometallic compounds), Izd. AN SSSR, no. 5, 1947, p. 11), and was thoroughly purified. Et_6Ge_2 was obtained by reaction of Et_3GeBr with metallic potassium in dry, pure nitrogen atmosphere. The combustion enthalpy was determined by a method described previously (S. M. Skuratov, A. A. Strepikheyev, et al., Uch. zap. Moskovsk. univ., 164, 73 (1953)).

Card 1/3

S/020/63/149/002/018/028

B117/B186

Thermochemistry of tetraethyl germanium ...

The following averaged values were found:

$$-\Delta H^{\text{comb.}} \left[(C_2H_5)_4\text{Ge} \right] = 1515.6 \pm 1.5 \text{ kcal/mole}$$

$$-\Delta H^{\text{comb.}} \left[(C_2H_5)_3\text{Ge} - Ge(C_2H_5)_3 \right] = 2321.0 \pm 2.0 \text{ kcal/mole.}$$

Standard enthalpies of formation, evaporation and atomization for the liquid and gaseous phase of the compounds studied were calculated from the combustion and evaporation enthalpies of the liquids studied and from data published on the formation enthalpy of the combustion products:

Substance	$-\Delta H^{\text{form.}}$ liqui..	$\Delta H^{\text{evap.}}$	$-\Delta H^{\text{form.}}$ g.	$\Delta H^{\text{atpm.}}$
$(C_2H_5)_4\text{Ge}$	50.3 ± 1.5	10.1 ± 0.3	40.2 ± 2.0	2542 ± 5
$(C_2H_5)_3\text{Ge}-\text{Ge}(C_2H_5)_3$	92.9 ± 2.0	14.9 ± 0.5	78.0 ± 2.5	3875 ± 10

From the atomization enthalpy and mean bond energies of the C-C and C-H bonds the averaged values of bond energy of Ge-C in $Et_4\text{Ge}$ were found to

Card 2/3

S/020/63/149/002/018/028
B117/B186

Thermochemistry of tetraethyl germanium ...

be 58.9 ± 1.5 kcal (error 1 kcal), and of Ge-Ge in Et_6Ge_2 to be 62 ± 5 kcal (error 2 kcal). In this calculation, the mean bond energy of Ge-C was taken to be equal in both compounds. The values found for the mean bond energy of the Ge-C bond indicate that the primary state which limits the rate of the process should be considered the reaction $\text{Ge}(\text{C}_2\text{H}_5)_4 \rightarrow \text{Ge}(\text{C}_2\text{H}_5)_3 + \text{C}_2\text{H}_5$ and not the decomposition to Ge and $4\text{C}_2\text{H}_5$ as stated by R. L. Geddes and E. Mack (Jr., J. Am. Chem. Soc., 53, 4372 (1930)). There are 1 figure and 1 table.

ASSOCIATION: Institut khimii pri Gor'kovskom gosudarstvennom universitete im. N. I. Lobachevskogo
(Institute of Chemistry at the Gor'kiy State University imeni N. I. Lobachevskiy)

SUBMITTED: November 15, 1962

Card 3/3

STEFANOV, T.; KARYAKIN, P.

Interfarm gypsum production enterprise. Sil'.bud. 11 no.6:16-17
Je '61. (MIRA 14:7)

1. Predsedatel' soveta Khmel'nitskogo oblastnogo gipshkolkhozstroya (for
Stefanov). 2. Direktor Rikhtenskogo meshkolkhoznogo gipsovogo
zavoda (for Karyakin).

(Gypsum)

KARYAKIN, P.I.

AUTHORS: Shuralev, M.V. and Karyakin, P.I. 133-6-20/33

TITLE: Application of roller passes for rolling large sections.
(Primeneniya rolikovykh propuskov pri prokatke krupnykh profiley).

PERIODICAL: "Stal'" (Steel), 1957, No.6, pp.548-549 (USSR).

ABSTRACT: Due to the rapid and non-uniform wear of flat profiles on the above works, they were replaced by roller passes (Figs.1-4). The most suitable steel for rollers was found to be carbon steel 45 (with 0.40-0.50% of C) with hardening in water. For rolling round profiles of 90 m and above, the diameter of rollers used is 100 mm and for profiles 55-85 mm the diameter of rollers is 85 m. The above change improved the quality of rolled products and increased the output by 4 - 6%.

There are 4 figures.

ASSOCIATION: Zlatoust Metallurgical Works.
(Zlatoustovskiy Metallurgicheskiy Zavod).

AVAILABLE: Library of Congress
Card 1/1

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2

GOKHSHTEYN, B.Ya., kand. tekhn. nauk; REBRIK, B.N., kand. tekhn. nauk;
LAPIN, V.B., inzh.; KARYAKIN, R.N., inzh.

First electrified section operating on alternating current.
Elek. i tepl. tiaga no.1:8-10 '57. (MIRA 12:3)
(Electric railroads)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2"

AVERIN, Yu.A., inzh.; GLUSHKOV, Ye.F., inzh.; KARYAKIN, R.N., inzh.

Investigating the power factor of a.c. electric traction systems
used in rectifier electric locomotives. Trudy TSNII MPS no.156:33-48
'58. (MIRA 11:8)
(Electric locomotives) (Mercury-arc rectifiers)

AVERIN, Yu.A., inzh.; KARYAKIN, R.N. inzh.; PANIN, A.P., inzh.

Results of experimental determination of the spectral composition
of initial currents used in rectifier electric locomotives. Trudy
TSNII MPS no.156:49-57 '58. (MIRA 11:8)

(Electric locomotives)
(Mercury-arc rectifiers)

KARYAKIN, R.N., inzh.

Estimating the amount of electric traction network equivalent interference current, taking resonance into account, needed for the operation of rectifier electric locomotives. Trudy TSNII MPS no.156:58-66 '58. (MIRA 11:8)
(Electric locomotives) (Mercury-arc rectifiers)

KARYAKIN, R.N., insh.

Damping resonance vibrations caused in traction networks by
the operation of electric locomotive rectifiers. Vest.TSNII
MPSA 18 no.3:42-45 My '59. (MIRA 12:8)
(Electric railroads--Wires and wiring)
(Electric locomotives--Electric equipment)

KARYAKIN, R.N., inzh.

Resonance phenomena in traction networks during feeding of
rectifier electric locomotives. Trudy TSNII MPS no.170:91-135
'59. (MIRA 12:?)

(Resonance) (Electric locomotives)

KARYAKIN, R. N., Cand Tech Sci (diss) -- "Resonance oscillations and their damping in traction networks feeding rectifying electric locomotives". Moscow, 1960. 19 pp (Min Transportation USSR, All-Union Sci Res Inst of Railroad Transport), 150 copies (KL, No 15, 1960, 135)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2

KARYAKIN, R.N., kand.tekhn.nauk

Equivalent current spectrum in a traction network. Trudy TSNII
(MIRA 14:3)
MPS no.201:82-105 '60.
(Electric railroads--Current supply)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2"

KARYAKIN, Rudolf Nikoleyevich; BYSTROV, K.N., red.; OVSYANNIKOVA, Z.G.,
red. izd-va; PAVLOVA, V.A., tekhn. red.

[Resonance in traction networks and its damping] Rezonans v tiago-
vykh setiakh i ego dempferovanie. Moskva, Gos. izd-vo "Vysshiaia
shkola," 1961. 229 p.
(MIRA 14:10)
(Electric railroads--Substations)

KARYAKIN, R.N., kand.tekhn.nauk; TAMAZOV, A.I., inzh.

Experimental study of rail potentials on a.c. electric railroads.
Vest. TSNII MPS 20 no.6:18-21 '61. (MIRA 14:10)
(Electric railroads--Rails)

KARYAKIN, R.N.; BORODULIN, B.M., inzh.

Resistance of a.c. traction networks. Vest.TSNII MPS 21 no.4:10-14
'62. (MIRA 15:6)
(Electric railroads—Current supply)

KARYAKIN, R.N.; PETUSHKOVA, I.K., red.; GROMOV, Yu.V., tekhn.red.

[Methods of calculating the resistances of a.c. traction networks] Metodika rascheta soprotivlenii tiagovykh setei peremennogo toka. Moskva, Transzheldorizdat, 1962. 36 p.
(MIRA 15:10)

(Electric railroads--Current supply)
(Electric lines--Overhead)

KARYAKIN, R.N., kand.tekhn.nauk; FEDOROVA, V.P., inzh.

Analysis of the stability of the resistance of a traction network.
Trudy TSNII MPS no.256:28-42 '63. (MIRA 16:6)
(Electric railroads--Current supply)
(Electric railroads--Wires and wiring)

KARYAKIN, R.N., kand.tekhn.nauk; LAPIN, V.B., inzh.; SHUKHATOVICH, L.I., inzh.

Short-circuit currents in a.c. traction networks. Trudy TSNII MPS
no.256:43-60 '63.

(MIRA 16:6)

(Electric railroads--Wires and wiring)
(Electric railroads--Current supply)

KARYAKIN, R.N.; PUPYNIN, V.N., kand.tekhn.nauk; KUZNETSOVA, G.S., inzh.

Experimental investigation of the current drain circuit of a.c.
traction substations. Vest.TSNII MPS 22 no.6:22-25 '63.
(MIRA 16:10)

KARYAKIN, Rudol'f Nikolayevich; RATNER, M.P., retsenzent; BYSTROV,
K.N., kand. fiz.-matem. nauk, red.; VOROTNIKOVA, L.F.,
tekhn. red.

[A.C. traction networks] Tiagovye seti peremennogo toka.
Moskva, Izd-vo "Transport," 1964. 185 p. (MIRA 17:4)

KARYAKIN, R.N., kand.tekhn.nauk (Moskva); KUZNETSOVA, G.I., inzh. (Moskva);
PUPYNNIN, V.N., kand.tekhn.nauk (Moskva); SUMIN, A.R., inzh. (Moskva)

Selection of effective networks and optimal parameters of the
power take-off circuits of a.c. traction substations. Elektrичество
no.11:10-18 N '64. (MIRA 18:2)

"APPROVED FOR RELEASE: 06/13/2000

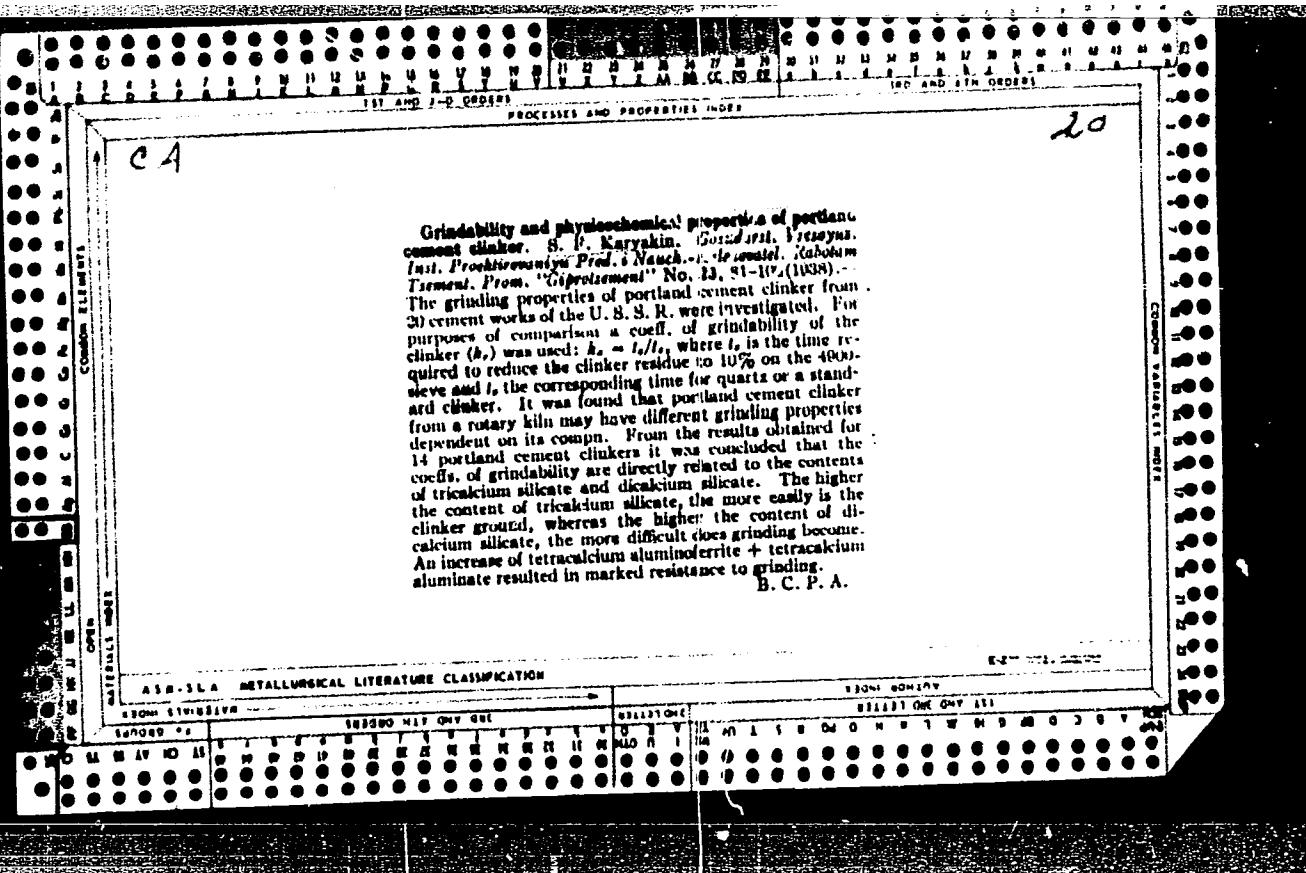
CIA-RDP86-00513R000720920018-2

KARYGIN, V. N., Akad. Nauk. (Moskva)

Cathodic effect of a.c. traction networks. Elektrichestvo no. 8:
57-62 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000720920018-2"



KARYAKIN, S. P.

Karyakin, S. P. - "Modern improvement and ways of developing the technique of fine grinding" Trudy 4-go Vsesoyuz. soveshchaniya zavodskikh i laboratornykh tsentr, prom-sti, Leningrad, 1948, p. 166-88.

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

KARYAKIN, S.F., kandidat tekhnicheskikh nauk.

~~Mills for grinding coal with simultaneous drying. TSegment 14~~
no.6:19-20 N-D '48.
(MLRA 9:5)
(Novorossiysk--Crushing machinery)

CA

20

Test results of a 2.6 X 13 meter' cement mill with a radial partition. S. F. Karyakin, Thement 17, No. 3, 13-17 (1961).—The 6-chamber mill has a radial partition in the fourth chamber dividing the latter into 6 sections. The av. production of this mill in a test run was 20.1 tons per hr., with a fineness of 0.63% on a 0200 and 10.2% on a 0000 screen. Structural and operational details are given.
M. Hesch

1. KARYAKIN, S. F.
2. USSR (600)
4. Kilns, Rotary
7. Increasing the productivity of rotary kilns by substituting slag for clay in the wet production process, TSement, 19, no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KARYAKIN, S. I.

USSR/Physics

Fluorescence
Chemistry - Anthraquinone

"The Extinguishing of Fluorescence and Metastable
Triplet States," S. I. Karyakin, A. N. Terenin,
State Opt Inst, 9 pp

Jan/Feb 49

"IZ Ak Rauk SSSR, Ser Fiz" Vol XIII, № 1

Conducted extensive investigation of anthraquinone
and 24 of its derivatives in vaporous and adsorbed
states under high vacuum to determine which features
in molecular structure are responsible for extinguish-
ing of its fluorescence by oxygen. Tabular results

36/49T100

USSR/Physics (Contd)

show molecular structure, spectrum maxima of
fluorescence for vapors, extinguishing by O₂ on the
vapors and the adsorbates, and duration (sec) of
excited state.

Jan/Feb 49

36/49T100

KARYAKIN, V.

Expand the technical creativeness of the masses. Sov.profsoiuzy
6 no.16:12-17 II '58. (MIRA 12:2)

1. Predsedatel' Orgkomiteta Vsesoyuznogo obshchestva izobretateley
i ratsionalizatorov.
(Inventions, Employees)

KARYAKIN, V.

Toward the congress of the CPSU. Izobr. i rats. no.1:1-4
Ja '59. (MIRA 12:1)

1. Predsedatel' Orgkomiteta Vsesoyuznogo obshchestva izobretateley
i ratsionalizatorov.
(Inventions) (Efficiency, Industrial)

KLOCHKOV, A., kand.tekhn.nauk, dotsent; KARYAKIN, V., assistant

Using gasoline and condensate as fuel for motor-vehicle engines.
Trudy SADI no.16 pt.1.:156-162 '59. (MIRA 13:11)
(Gasoline) (Yelshanka--Condensate oil wells)

KARYAKIN, V.D., inzh.; NEYMAN, Ya.L.

Assembly of production lines in machinery-construction plants.
Mont. i spets. rab. v stroi. 24 no.9:3-5 S '62. (MIRA 15:9)

1. Trest Yuzhtekhnmontazh.
(Factories—Equipment and supplies)

TERENT'YEV, V. I.; BABAYANTS, G. M.; KARYAKIN, V. F.

Systems of underground mining of ferrous quartzites at the Kursk
Magnetic Anomaly. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.
nauch. i tekhn.inform. no.10:3-8 '62. (MIRA 15:10)

(Kursk Magnetic Anomaly--Iron mines and mining)

AGOSHKOV, M.I.; TERENT'YEV, V.I., kand.tekhn.nauk; TERPOGOSOV, Z.A.,
kand.tekhn.nauk; KARYAKIN, V.F., gornyy inzh.

Practice of using a flat bottom in a mine of the Kursk Magnetic
Anomaly. Gor. zhur. no.9:28-31 S '62. (MIRA 15:9)

1. Chlen-korrespondent AN SSSR (for Agoshkov).
(Kursk magnetic anomaly--Iron mines and mining)